

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

SONOS, INC.,  
Plaintiff

No. 6:20-cv-881-ADA

v.

GOOGLE LLC,  
Defendant

**DEFENDANT GOOGLE LLC'S RESPONSE CLAIM CONSTRUCTION BRIEF**

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## I. INTRODUCTION

Google LLC (“Google”) hereby submits its responsive claim construction brief for U.S. Patent Nos. 9,344,206; 10,469,966; and 10,848,885 (the “Zone Scene” Patents)<sup>1</sup> and U.S. Patent Nos. 9,067,615 and 10,779,033 Patents (the “Direct Play” Patents).<sup>2</sup> Google provides constructions that follow the intrinsic evidence, particularly where Sonos has coined terms that have no understood meaning outside the asserted patents, such as “zone scene.” Google also refrains from proposing constructions where the intrinsic record does not require it. Sonos, Inc.’s (“Sonos”) proposals are inconsistent with the intrinsic record, providing unduly narrow and lengthy definitions for well-understood terms like “local area network,” based solely on exemplary disclosed embodiments. For critical coined terms, Sonos takes the opposite approach. It refuses to construe them at all, instead burying them in long phrases in an exercise in obfuscation. Finally, many of the terms have no ascertainable meaning and thus are indefinite.

## II. TECHNICAL BACKGROUND

### A. Speaker Grouping

Grouping speakers together for music playback has long been known in the art. Patents filed years before the Zone Scene Patents described “remote unit[s] for selectively controlling . . . music *from the at least one group of speakers.*” U.S. Patent No. 7,339,492 at 1:10-12. The Zone Scene Patents likewise admit that “multi-zone audio system[s] that usually includes a number of audio players” were “conventional” at the time. ’206 Pat. at 1:40-43. Home audio systems from companies such as Bose and Crestron provided home theater enthusiasts the ability to set up multiple speaker zones in their house and dynamically select music to play from

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<sup>1</sup> These three patents are each continuations, sharing substantively the same specification and all claim priority to a single provisional application filed on Sept. 12, 2006.

<sup>2</sup> These two patents are continuations, both claim priority to an application filed on Dec. 30, 2011. Google

each. Ex. 1 at pp 15-20 (Bose System describing Preset Groups). Indeed, even Sonos’s own prior art products describe grouping speakers into “zones,” combining zones into “zone groups” and including preset groups such as “Party Mode.” Ex. 2 at 11.

The Zone Scene Patents attempt to iterate on this robust market for home theater systems by adding “theme” or “scene” information to conventional speaker groupings. They describe the invention as “[u]sing what is referred to [] as a theme or a zone scene,” to configure zones “in a particular scene (e.g., morning, afternoon, or garden), where a predefined zone grouping and setting of attributes for the grouping are automatically effectuated.” ’206 Pat. at 8:24-28. For example, a user could set up a “morning” “zone scene” to play a morning playlist on a zone grouping. *Id.* at 8:29-31.

#### **B. Remote Playback and “Direct Play”**

Unmentioned by Sonos, the Direct Play Patents claim priority to an application filed Dec. 30, 2011—six years after Sonos released its first products. By 2011 all the elements of Sonos’s alleged Direct Play invention were well known, including (1) network-enabled audio devices; (2) remote or “cloud” based music systems; and (3) playlist or queue management to transfer playback from one device to another. *See e.g.*, Exs. 3-5. You do not have to take Google’s word for it. According to Sonos itself, “as of 1999-2000, implementing playlists on a network-enabled audio device to select, manage, and manipulate audio content was well known in the art.” Ex. 6 at 14. For example, the “RioPort Audio Manager provided a graphical user interface (GUIs) for users to select and play music transmitted from a central database in a network. Consumer products with playlist functions had become common by the year 2000.” *Id.* at 13. Before the filing date of these patents, Google itself had already developed “cloud” services that delivered media such as videos or music remotely over a network, such as Google Music Beta and YouTube. *See e.g.*,

Ex. 7 (YouTube Remote) and <https://www.youtube.com/watch?v=9ZlgcuG3sZc> (Google Music Beta).

### III. CLAIM TERMS

#### A. “multimedia” (’206 and ’615 patents)

Sonos Construction	Google Construction
“any type of media that comprises audio (including audio alone)”	Plain and ordinary meaning; no construction necessary at this time

Google contends the plain and ordinary meaning should apply, whereas Sonos contends that multimedia should be redefined to cover audio alone. The Court should decline to construe this term because it is easily understood by the jury without construction, and there is no reason to depart from the plain meaning as Sonos requests.

The plain meaning of “multimedia” is evident from the word itself—multiple media. The specifications of the ’615 and ’206 patent are consistent with this plain meaning because they describe “zone players” as outputting audio, video, and/or audiovisual data. ’615 at 3:28-31; ’206 patent, 6:12-16, Abstract. Further, technical dictionaries uniformly show that multimedia involves multiple media. Exs. 9. Even Sonos’s expert, Dr. Almeroth, testified in a prior IPR proceeding that “the Internet has evolved to support more complex data transactions including *multiple media types (e.g., images, audio, video), hence the concept of ‘multimedia.’*” Ex. 10 at ¶15.

Sonos’s main argument to redefine this term is that its construction was adopted in *Sonos, Inc. v. D&M Holdings, Inc. et al.*, Case No. 14-cv-01330 (D. Del.) (“D&M”). Br. 2-3. The D&M case, however, involved patents that have different claim language and which are *not* asserted here. Br., Ex. 6 at 14. Google did not object to the D&M construction in the ITC case because

the same D&M patents *were* at issue in the ITC.<sup>3</sup> The same is not true here, and for that reason Google argues that the intrinsic and extrinsic evidence in *this* case should be applied. The Direct Play Patents were filed more than six years after the ITC and D&M patents. It would be error to rely on constructions for different patents from a different time, and Sonos cites no authority justifying such an approach. *Emerson Elec. Co. v. SIPCO, LLC*, 826 Fed. App'x 904, 914 (Fed. Cir. 2020) (“construction of a particular term in one patent will not necessarily bear on the interpretation of the same term in a subsequent patent because the factual context is different. The term may be identical, but the intrinsic evidence is not.”).

When it finally addresses the intrinsic record for these patents, Sonos fails to articulate any basis for deviating from the plain meaning. None of the embodiments Sonos relies upon redefine multimedia from meaning “multi” media to meaning “single” or “audio” media, as Sonos argues. *See e.g.*, Br. at 3 (citing Fig. 1, “an exemplary configuration.”).

**B. “network interface” (’206, ’615, and ’885 patents)**

Sonos Construction	Google Construction
<p>“a physical component of a device that provides an interconnection with a <u>data network</u>”</p> <p>“<u>data network</u>” means “a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other”</p>	<p>Plain and ordinary meaning; no construction necessary at this time</p>

The main dispute centers around the use of the term “data network” in Sonos’s construction. Like a set of Russian nesting dolls, Sonos incorporates its lengthy and unjustified construction of “data network” into its constructions for “local area network,” “playback device,” and “zone player.” For example, when “data network” is incorporated into Sonos’s “network

<sup>3</sup> In the ITC case, Google also agreed to constructions for two other patents, which also have no family relationship to the patents asserted in this case.



interface” proposal, its full construction is: “a physical component of a device that provides an interconnection with a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other.” There is no justification to redefine the relatively simple phrase “network interface” into Sonos’s unduly narrow construction. Plain meaning is appropriate.

Sonos urges the Court to adopt its construction by arguing that Google “agree[d]” to its construction of “network interface” in the ITC action and the “ITC adopted this construction.” Br. at 4. As stated above, however, Sonos’s invocation of the ITC rulings are invitations to error given the difference in patents and intrinsic record. But they are even more misleading here because Sonos neglects to inform the Court that in the ITC action both the ALJ and ITC staff concluded that the term “data network” should *not* be “restricted to a ‘data network for transferring digital data packets between network devices’” because “limiting ‘data network’ in this way is ‘inconsistent with the intrinsic evidence (and pertinent extrinsic evidence.)’” Br., Ex. 7 at 16-17. The intrinsic and extrinsic evidence here dictates the same result. *See* Section III.A.<sup>4</sup>

**C. “playback device” [’206, ’615, ’033 Patents] / “zone player” [’966, ’885 Patents]**

Sonos Construction	Google Construction
“a <u>data network</u> device configured to process and output audio”	Plain and ordinary meaning; no construction necessary at this time

<sup>4</sup> Sonos’s reliance on the Delaware court’s decision in Sonos’s action against D&M is also misplaced. Br. at 4. Not only did that action involve a different patent, but it also addressed a different dispute. As the Delaware court explained, the dispute between the parties was whether or not the network interface needed to be a component of the zone player device itself (as Sonos proposed) or if it could be a system component (as the defendants in D&M proposed). Ex. 6 at 12 (“Defendants’ primary argument as to the construction of this term is that the network interface need not be a component of the device itself.”). The court in the D&M action resolved this dispute in Sonos’s favor and thus adopted Sonos’s construction over the defendants’ construction. *Id.* In the instant case, the parties’ dispute is not centered around whether or not the network interface is part of the device (as opposed to the system) and the decision in D&M is thus inapplicable.

This is another instance where Sonos seeks to import several limitations using its “data network” construction. But the term at issue, “playback device,” is easily understandable by the jury. The patent does not ascribe any special meaning to this term either. Accordingly, “playback device” should be given its plain meaning. The parties also agree “zone player” should be construed the same as “playback device,” so it too should be given its plain and ordinary meaning.<sup>5</sup>

First, as it does with the term “network interface” and “local area network,” Sonos attempts to restrict this term to a network device that transfers “digital data packets” by incorporating its construction of “data network.” Sonos again argues that Google agreed to its construction of “playback device” in the ITC action. Br. at 5. But in the ITC action, the ALJ and ITC staff both concluded that restricting a playback device to transferring “digital data packets” would be “inconsistent with the intrinsic evidence (and pertinent extrinsic evidence.)” Br., Ex. 7 at 17. Sonos’s argument is again misleading regarding the history at the ITC. Google did *not* agree to Sonos’s actual construction for this term (*i.e.* including its definition of “data network”). Like in the ITC case, Sonos’s attempt to limit playback device and zone player to transferring “digital data packets” is inconsistent with the intrinsic and extrinsic evidence.<sup>6</sup>

#### **D. “zone” [All Patents]<sup>7</sup>**

<b>Sonos Construction</b>	<b>Google Construction</b>
No separate construction necessary.	“an area or areas with one or more playback devices”

<sup>5</sup> Google’s construction of “zone” applies to this term, but the phrase overall needs no separate construction.

<sup>6</sup> Sonos’s reliance on the Delaware court’s decision Sonos’s action again D&M is again misplaced. In the *D&M* decision the parties’ dispute was whether a “zone player” or “playback device” should be construed as a device that outputs “audio” (as proposed by Sonos) or if it should be construed more broadly as a device that outputs “sound waves” (as proposed by the defendants in that case). Br., Ex. 6 at 8-9. The parties did not dispute whether the term was restricted to “digital data packets” in the Delaware case.

<sup>7</sup> Sonos took issue with Google’s proposal because it only offered it for the Zone Scenes Patents. Google has adjusted its proposal to apply to Direct Play Patents as well.

Sonos raises no substantive disputes with Google’s proposed construction, and Google’s construction should be adopted because it is supported by definitional intrinsic evidence and would be helpful to the jury. *See BookIT Oy v. Bank of America Corporation*, 2020 WL 3967842, \*3 (Fed. Cir. 2020) (“[t]here can be no clearer definitions than those expressly recited in the patent”). In the context of these patents, a zone is an area containing one or more playback devices. The ’206 Patent explicitly defines “zone” as such: “Each of the audio devices may be installed or provided in one particular area or zone and hence referred to as a zone player herein.” ’206. at 4:33-36; *Biogen MA Inc. v. EMD Serono, Inc.*, 976 F.3d 1326, 1335–36 (Fed. Cir. 2020) (affirming construction where the plaintiff “explicitly defined ‘polypeptide’ in the [] patent”). The intrinsic evidence directly supports Google’s proposal. *E.g.*, ’206 Patent at Abstract (“each of the players is located in a zone”); 1:28-29 (“manipulating a plurality of multimedia players in a multi-zone system”); 2:32-33 (“each of the players is located in a zone”). There is no serious dispute that “zone” means anything other than “an area or areas with one or more playback devices.”

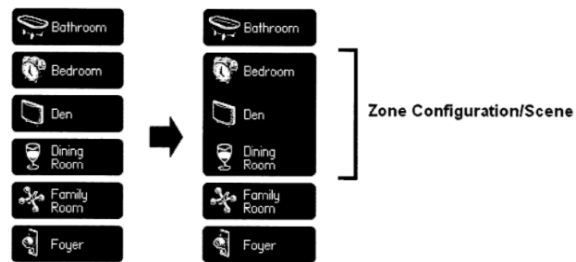
Sonos takes issue with Google’s construction by arguing that “area” may not be more understandable to a jury than “zone,” but this argument misses the point. Br. at 7. A zone is an area containing playback devices, so Google is not redefining “zone” as “area.” Sonos also complains that the jury will not know “whether (or how) [it] should plug in the naked definition of ‘zone’ into [the claims].” Br. at 7. But humans use definitions of words in other contexts every day. This concern is also belied by Sonos’s own constructions, which often create the same alleged problem. *See* Section III.D (Sonos proposing a construction of “playback device” that is grammatically incorrect when its construction for “data network” is included).

#### **E. “zone configuration” [’206 Patent]**

<b>Sonos Construction</b>	<b>Google Construction</b>
Not indefinite	“Zone configuration” is indefinite.

The claims require that the “zone configuration characterizes one or more zone scenes” and that “each zone scene identif[ies] a group configuration.” *E.g.*, ’206 Pat. at cl. 1. But the intrinsic evidence does not explain how a “zone configuration” can be distinguished from “group configuration” and how each of those terms relates to a “zone scene.”

The claims provide no guidance because the bare assertion that they “characterize” or “identify” each other only adds more ambiguity. The specification conflates the terms “zone configuration” and “group configuration” by referring to them either synonymously or together as a “zone group configuration.” ’206 Patent, 5:43-57 (“in reference to a saved zone group configuration characterizing a zone group created by a user”); *id.* at 5:54-59 (“a saved zone group configuration file is transmitted to a controller . . . . The zone group configuration provides an interactive user interface so that various manipulations or control of the zone players may be performed.”). The figures confuse “zone configuration” with “zone scene” in the same way. ’206 Pat. Fig. 3A.



**FIG. 3A**

Because of the conflicting intrinsic evidence confusing these terms, a POSITA is unable to tell what comprises a “zone configuration” versus a “group configuration” and how each relates to a “zone scene.” *Infinity Computer Prod., Inc. v. Oki Data Americas, Inc.* is instructive. 987 F.3d 1053, 1060 (Fed. Cir. 2021). There, the Federal Circuit found the term “passive link” indefinite because the patentee had given conflicting explanations for the scope of the term. *Id.* The same is true here. The specification’s repeated confusion of “zone configuration,” “zone scene” and “group configuration” fails to provide reasonable certainty about the scope of the

claims.<sup>8</sup> A POSITA is left to guess what type and amount of information are necessary to have a “zone configuration” or one that “characterizes one or more zone scenes.”

In response, Sonos argues that “zone configuration” is not indefinite because “the ‘zone configuration’ comprises a *data representation* of the ‘zone scene.’” Br. at 11 (emphasis added). This argument does not withstand scrutiny. First, Sonos provides no explanation for where it derives this language—it points to no extrinsic evidence that uses the term “data representation,” and that term never appears in the specification. Sonos tellingly provides no examples of what such a “data representation” comprises, let alone the metes and bounds of such a “data representation” that “characterizes” a zone scene.

Second, even under Sonos’s proposals there is no way to meaningfully distinguish between a zone configuration and a zone scene. Sonos contends a “zone scene” is “previously-saved” speaker grouping. Br. at 12. But the only thing that can be “saved” is a “data representation” of the zone scene. Thus, there is no way to distinguish between a “previously-saved” zone scene and Sonos’s proposal for a zone configuration as a “data representation” of a zone scene. The specification similarly refers to “saving” a scene, contradicting Sonos’s argument that a zone scene may not include a “data representation.” E.g., ‘206 Pat. at 10:9-16 (“At 606, the scene is saved. The scene may be saved in any one of the members in the scene.”); 2:48-51; 6:6-11; 10:21-25. This is put into stark relief when the accused systems are speakers that operate on data and smartphones that operate on data, and all data is stored as a “data representation.” Sonos provides no way to distinguish these terms, and instead baldly asserts that “[a] POSITA would have no

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<sup>8</sup> Coined terms with no definition in the intrinsic evidence are indefinite. *IQASR LLC v. Wendt Corp.*, 825 F. App’x 900, 904 (Fed. Cir. 2020) (holding claim indefinite where the specification “fails to offer any meaningful and functional explanation of the definitional characteristics of [a coined term]”) (cleaned up).

trouble recognizing this [data representation] distinction.” Notably Sonos cites no evidence for that proposition despite offering two expert declarations. Br. at 17.

Google’s expert, Dr. Kyriakakis is an expert in acoustical measurement and advanced signal processing for speaker systems. Ex. 11 at ¶8-9. He has been designing and studying these systems since receiving his Ph.D. in electrical engineering in 1993, and as a result he *is* a POSITA. *Id.* at ¶34. Contrary to Sonos’s unsubstantiated claims, Dr. Kyriakakis has opined that in the context of an electronic device, a “data representation” of a zone scene is substantively identical to a zone scene. *Id.* at ¶45-46. Sonos’s proposed construction fails to offer any certainty, much less a reasonable certainty, of what comprises a “zone configuration” that is distinct from a “zone scene.”

**F. “zone configuration characterizes one or more zone scenes” [’206 Patent]**

Sonos Construction	Google Construction
“configuration data that provides an indication of one or more zone scenes”	“Zone configuration” is indefinite.  See “zone” and “zone scene” terms.

Google does not propose a separate construction for this phrase, but instead proposes to construe the key terms in the phrase separately: “zone,” “zone scene,” and “zone configuration.” This is the sensible approach given that “zone” and “zone scene” appear in many other parts of the claims, so the jury can recognize and implement one construction wherever that term appears.

If the Court does decide to construe this phrase, it should reject Sonos’s proposed construction, which it does not even claim is the plain and ordinary meaning of the term. Further, replacing “zone configuration” with “configuration data” completely removes the claim requirement that the “configuration” be about a “zone.” That violates the fundamental principle that claim construction begins with the words of the claim. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).

Sonos's decision to replace "characterizes" with "provides an indication" is both unhelpful and incorrect. Unhelpful because Sonos articulates no difference between these two terms. And incorrect because Sonos uses the term "indication" inconsistently with the rest of the claim language. *Phonometrics, Inc. v. Northern Telecom Inc.*, 133 F.3d 1459, 1464 (Fed. Cir. 1998) ("A word or phrase used consistently throughout a claim should be interpreted consistently."). Specifically, "indication" is used elsewhere in the '206 Patent claims to describe a user's interaction with the claimed system via a "selectable indication." '206 Pat. at 11:5. By contrast, Sonos is apparently arguing now that "indication" means that certain data "indicates" some relation to a zone scene.

Sonos cites to the claim language for support, but none of the claim language suggests "zone configuration" must mean "configuration data." The word "data" does not even appear in Sonos's claim language citations. The specification does not support this construction either—"configuration data" is absent from the specification. Undeterred, Sonos cites to a reference to "zone configuration files" and concludes that this demonstrates that zone configuration refers to "configuration data." But the cited quote never refers to "configuration data," making the conclusion a *non sequitur*. Sonos then cites to '206 Patent at 10:10-20, but this portion of the specification only states that "[t]he user may go back to 602 to configure another scene if desired." Br. at 9. This similarly does not mention "configuration data." And none of Sonos's citations at all address how "configuration data" characterizes or "provides an indication of" a zone scene.

Sonos's reliance on the prosecution history is similarly puzzling because the portions of that history cited by Sonos primarily state that the Isely prior art reference did not store information identifying a **group** configuration. *Id.* at 10. But "group configuration" is a separate term than "zone configuration." Sonos's conflation of these terms just underscores their indefiniteness.

Regardless, the cited portions do not mention “data” at all, let alone “configuration data.” *Id.* At bottom, Sonos simply plucks “configuration data” from thin air in a futile attempt to save the claims from indefiniteness.

**G. “zone scene” [’206 Patent]**

Sonos Construction	Google Construction
No separate construction necessary.	“a group of two or more zones that are grouped according to a common theme by configuring the zones in a particular scene (e.g., morning, afternoon or garden)”

The Court should adopt Google’s proposed construction because it is how Sonos defined this *coined term* in the specification, and the intrinsic evidence uniformly supports the construction. *IQASR LLC v. Wendt Corp.*, 825 F. App’x 900, 904 (Fed. Cir. 2020) (“The importance of the intrinsic evidence reaches its zenith in cases like this when the district court finds from the extrinsic evidence that the term lacks an ordinary meaning.”). As a coined term that has no plain and ordinary meaning—and both parties agree that is the case—the Court’s construction must be limited to the disclosures in the intrinsic evidence. *Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1351-53 (Fed. Cir. 2019) (finding “high quality of service connection” to be a “coined” term and affirming construction limiting the term to the minimum parameters disclosed in the specification).<sup>9</sup>

<sup>9</sup> See also *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1164 (Fed. Cir. 2004) (where parties agreed that the term “marker substance” has no accepted meaning, “we construe [the term] only as broadly as is provided by the patent itself”); *Enserion, LLC v. Orthofix, Inc.*, No. 4:20-CV-108, 2021 WL 822169, at \*10 (E.D. Tex. Mar. 4, 2021) (“Plaintiff does not show that the term “intelligent rehabilitation member” has any well-established meaning outside of the patent-in-suit, so looking to the specification for meaning is appropriate.”); *Intervet, Inc. v. Merial Ltd.*, 617 F.3d 1282, 1287 (Fed. Cir. 2010) (“Idiosyncratic language, highly technical terms, or terms coined by the inventor are best understood by reference to the specification.”).



Here, the specification explicitly defines what “zone scene” means: “Using *what is referred to herein as a theme or a zone scene*, zones can be configured in a particular scene (e.g., morning, afternoon, or garden), where a predefined zone grouping and setting of attributes for the grouping are automatically effectuated.” ’206 Pat. at 8:24-26. Google’s construction directly tracks this definition, and is also consistent with the remaining evidence in the specification. For example, Figures 3A and 8 show how the inventors contemplated creating the “zone scenes.” ’966 Pat. at Figs. 3A & 8. As shown in Fig. 3A, the “zone scene” begins (but does not end) with a grouping of two or more zones (here, the Bedroom, Den, and Dining Room zones). The specification states that “the left column shows the *starting zone grouping*—all zones are separate, the column on the right shows the effects of grouping the zones to make a group of 3 zones named after ‘Morning’.” ’206 Pat. at 8:29-36 (emphasis added). “Zone scene” is not just a grouping of zones, however, it is creating a “scene”—here the “Morning” scene. As shown in Figure 8, from the “zone menu” a particular “scene” may be selected for that zone, such as “party mode,” “Wakeup,” or “Garden Party.” ’966 Pat. Fig. 8. Figure 5A shows the same system, whereby multiple zones (in the “Your Zones” box on the left) are added to the “Morning” (identified in the top bar) Zone Scene on the right. *Id.* at 5A. Figure 6 likewise shows that the “zone scene” is saved with “parameters” (606) regarding the scene. The specification provides the following parameters that may be applied to the zone scene:

- Set Volumes levels in each Zones (each Zone can have a different volume) Mute/Unmute Zones.
- Select and play specific music in the Zones.
- Set the play mode of the music (Shuffle, Repeat, Shuffle repeat)
- Set the music playback equalization of each Zone (e.g., bass treble).

*Id.* at 8:60-9:2. Google’s construction uses both the terms “theme” and “scene” to define the “zone scene” because the specification teaches that these terms are used interchangeably. *Id.* at 9:65-67 (“providing a player *theme or a zone scene* for a plurality of players”).

Accordingly, Google’s construction is the correct one. It requires that the “zone scene” be comprised of two or more zones, that those zones are grouped together according to a common theme, and provides examples of the thematic information such as “morning, afternoon, or garden.” Those examples of scenes are non-limiting and are used throughout the specification, amply supported by the intrinsic evidence. Google’s construction provides the jury with guidance as to the meaning of those terms by including examples that were also used in the patent’s definition of the term, while not limiting the definition to the disclosed embodiments.

Sonos purports to offer no construction, but the substance of its brief indicates otherwise. Br. at 12 (“there is no doubt that the claimed ‘zone scene’ in all three patents refers to the same thing: a previously-saved grouping of zone players that are to be configured for synchronous playback of media when the zone scene is invoked.”). Sonos should be barred from offering this construction because it failed to disclose it in its claim construction disclosures or the parties’ meet and confers. Even after Google sought relief from the Court on Sonos’s failure to disclose its actual constructions, Ex. 12, Sonos still did not disclose this construction for what it admits is a coined term. Sonos should not be permitted to now debut it in its claim construction brief.<sup>10</sup>

Even if Sonos’s construction is considered, it should be rejected because it reads out half of the phrase—a “zone scene” must include some type of “scene” information. *Pause Tech., LLC v. TiVo, Inc.*, 419 F.3d 1326, 1334 (Fed. Cir. 2005) (“In construing claims, however, we must give each claim term the respect that it is due.”). No part of Sonos’s construction includes an aspect of a “scene” as described in the specification.<sup>11</sup>

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<sup>10</sup> For example, Google is prejudiced by not being able to collect extrinsic and extrinsic evidence that addresses Sonos’s actual construction, nor possibly adjust its own proposals in response.

<sup>11</sup> The specification does not mention “previously saved” as a characteristic of a scene, nor does it describe “synchronous playback” as one. Other parts of the asserted claims do require saving and synchronous playback, and therefore including these aspects would create redundancy and

Sonos's complaints about Google's construction are meritless. First, Sonos argues that Google should not have included the terms "zone" or "scene" in its construction. This critique is somewhat surprising given that Sonos included the term "zone scene" in its construction of "zone scene." Regardless, Google separately defined "zone," so there is no ambiguity in its construction, and it provided further guidance as to the meaning of "scene," which is that it requires a common theme. Google also provided examples of scene information (morning, afternoon, or garden), taken directly from the specification, to illuminate the "zone scene" term for the jury. Google's construction therefore defines and describes the term, whereas Sonos's does not.

Second, Sonos argues that including the term "common theme" in Google's construction was improper because that term is undefined. But this ignores that it was the patent specification itself that defined zone scenes as including "theme" information. *E.g.*, '206 Pat. at Abstract ("a mechanism is provided to allow a user to group some of the players according to a theme or scene"). Construing the claim terms using the specification is exactly what the law requires. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).<sup>12</sup>

**H. "zone scene identifying a group configuration associated with two or more of the plurality of independent playback devices" ['206 Patent] / "[first / second] zone scene comprising a [first /second] predefined grouping of zone players including at least the first zone player and a [second / third] zone**

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confusion. *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1238 (Fed. Cir. 2016) ("construing a claim term to include features of that term that are already recited in the claims would make those expressly recited features redundant.").

<sup>12</sup> Sonos argues that Google's definition of "zone" and "zone scenes" are incompatible, but Sonos misunderstands Google's construction. Sonos argues that Google's construction implies "that a 'zone scene' is a group of two or more areas," and that this is incorrect because the claims describe the zone scenes as being associated with "playback devices" rather than "areas." Br. at 15. Not so. Google's construction of "zone" is "an area or areas *with one or more playback devices*." Accordingly, Google *has* construed zones as being associated with playback devices, and therefore the fundamental premise of Sonos's argument is untrue.

**player that are to be configured for synchronous playback of media when the [first /second] zone scene is invoked” [’966, ’885 Patents]**

<b>Sonos Construction</b>	<b>Google Construction</b>
“a previously-saved grouping of [independent playback devices / zone players] that are to be configured for synchronous playback of media when the zone scene is invoked”	No separate construction proposed. See “zone” and “zone scene” terms.

Google refers to its argument above regarding “zone scene,” which identifies the reasons that Sonos’s proposal is erroneous.

#### **I. “group configuration” [’206 Patent]**

<b>Sonos Construction</b>	<b>Google Construction</b>
No separate construction necessary.	Indefinite

As discussed in Section III.E, the intrinsic record itself provides conflicting explanations for what comprises a “zone configuration” versus a “group configuration” and how they relate to “zone scenes.” For the same reasons, “group configuration” is also indefinite.

For its part, Sonos does not attempt to offer a construction for “group configuration” and instead waves its hands at its proposed constructions for related terms. Sonos first argues that its construction for the term “zone scene” shows that “group configuration” is not indefinite, but it does not explain why. Br. at 16. Sonos’s vague claim that its construction “accounts for the claim’s usage of ‘group configuration’ and properly explains the meaning of ‘group configuration’ in the context of ‘zone scene’” is hard to credit given that even Sonos was unable to extract a definition of “group configuration” from it. *See id.*

Next, Sonos argues that its construction of “zone configuration” shows that “group configuration” is not indefinite, *id.*, but Sonos defines that term as “configuration data that provides an indication of a zone scene.” *Id.* This does not implicate “group configuration,” and therefore it is unclear how it could show that the term is not indefinite. Similarly, Sonos’s construction of

“zone scene identifying a group configuration” is “previously-saved grouping of . . . playback devices,” but once again this provides no insight as to the meaning of “group configuration” or how it is any different from “zone scene” or “zone configuration.” Sonos simply repeats its circular and vague claim constructions in the hope that because “group configuration” appears within them it will somehow confuse the Court into understanding that there is some meaning attributed to this term.

Finally, Sonos argues that because Google has proposed a construction for “zone scene” that this means Google cannot argue that “group configuration” is indefinite. Br. at 17. But these are not “conflicting” positions—these are different terms. *See id.* Google is arguing that “group configuration” does not have a reasonably ascertainable claim scope, and in particular that the claims fail to distinguish it from “zone scene” or “zone configuration.” Google understands and has proposed a construction for “zone scene” because it is a coined term defined in the specification. “Group configuration” is not defined in the specification, and the claims do nothing to distinguish it from “zone scene” or “zone configuration.”

**J. “invoked” / “invoke” / “invocation” [’206, ’966, ’885 Patents]**

Sonos Construction	Google Construction
Plain and ordinary meaning; no construction necessary at this time	<b>AGREED.</b> Plain and ordinary meaning; no construction necessary at this time

Sonos did not offer any construction or explanation for the “invoke” terms during the meet and confer process, but after reviewing Sonos’s briefing, and to reduce the disputes for the Court, Google agrees that the term may be given its plain and ordinary meaning.

**K. “causing the selectable indication of the at least one of the one or more zone scenes to be displayed” [’206 Patent]**

Sonos Construction	Google Construction
Plain and ordinary meaning; no construction necessary at this time	Indefinite

This term is indefinite because it lacks antecedent basis, and therefore a person of skill in the art cannot ascertain the claim’s scope with reasonable certainty. *See Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) (finding claim “indefinite if a [claim] term does not have proper antecedent basis”). Claim 19 recites “causing *the* selectable indication of the at least one of the one or more zone scenes to be displayed,” but there is no “selectable indication of the . . .” in either claim 19 or claim 17, from which claim 19 depends. Sonos claims that this issue would be fixed if claim 19 depended from claim 18, but that is not correct. Br. at 18. Sonos ignores that the indefinite term at issue begins with “causing the *selectable* indication,” and the only claim term in claim 18 that Sonos identifies as antecedent basis recites “causing an indication”—not causing a *selectable* indication. In other words, even if Sonos was right that claim 19 was supposed to depend on claim 18, the claim still lacks antecedent basis, and this error may not be corrected by the Court. *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003) (correction permissible “only if . . . the correction is not subject to reasonable debate”). Indeed, Sonos’s own confusion about the linking of these claims only highlights the indefiniteness issues in claim 19 of the ’206 Patent. Accordingly, the Court should hold that claim 19 does not provide reasonable certainty regarding its scope and is invalid.

**L. “local area network” [’615 Patent]**

Sonos Construction	Google Construction
“ <u>data network</u> that interconnects devices within a limited area, such as a home or office”	Plain and ordinary meaning; no construction necessary at this time

A “local area network” (“LAN”) is well-known in the field of networking. Because the patents do not ascribe a special meaning to the term, Google proposes that it be given its plain meaning. Sonos, on the other hand, seeks to (1) again incorporate its improper and lengthy construction of “data network” into the term LAN in order to restrict a LAN to a network that transfers “digital data packets,” and (2) limit a LAN to a geographic scope of “a home or office.” In the ITC action, the ALJ and ITC staff rejected a virtually identical proposal from Sonos (i.e., that LAN was a “data network that links devices within a limited area, such as a home or office”) as “inconsistent with the intrinsic evidence (and pertinent extrinsic evidence).” Br., Ex. 7 at 16-20.

The term LAN must be construed according to its plain and ordinary meaning, as the ’615 patent does not ascribe any special meaning to the term. In the context of the ITC action, the ALJ and the ITC staff found that a POSITA would have understood this plain and ordinary meaning to be: “a data communications network spanning a limited geographic area, such as an office, an entire building, or industrial park.” Br., Ex. 7 at 19-20. In fact, in the ITC action the court noted that its articulation of the term LAN is corroborated by the Modern Dictionary of Electronics (7<sup>th</sup> Ed. 1999) which Sonos’s own expert cited to approvingly. *Id.* Sonos does not explain why it disagrees with the plain meaning articulated by the ITC ALJ and staff.

Further, the narrower specialized meaning Sonos attempts to insert into LAN via its incorporation of “data network” injects restrictions into “LAN” far beyond its plain and ordinary meaning. For example, a LAN is not restricted to transferring “digital data packets.” Ex. 11 (Kyriakakis Decl.), ¶50; *see also* Br., Ex. 7 at 18-19. While the patent certainly discloses that in some embodiments a LAN may transfer digital data packets, Sonos does not cite any intrinsic

evidence that would justify limiting the plain meaning of LAN to only networks that transfer digital data packets.

Sonos's construction is also incorrect because it limits a LAN's geographic area to a "home or office." Sonos cites to the patent's disclosure that in one embodiment the LAN may cover a home (Br. 19-20), but other disclosures teach a LAN spanning a "hotel" ('615 patent at 13:41-49), which may include multiple buildings spread across an area larger than a home or office, such as a "complex." '206 Pat. at 6:12-16; *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007) ("A claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct."). Similarly, a POSITA would also understand that a LAN can span buildings, office complexes, and larger areas than that of a single home or office. Ex. 11, ¶52.

**M. "cloud" ['615 and '033 Patents]**

Sonos Construction	Google Construction
Plain and ordinary meaning; no construction necessary at this time	"over a network"

Google's construction is consistent with the plain meaning, specification and claims of the '615 and '033 patents. The specifications reference the cloud as a way to refer to communications over a network. *See* '615 patent at 1:52-54; 12:19-43; 17:12-20. Dictionary definitions also support Google's construction. Ex. 8 (collecting definitions).

While Sonos nominally proposes that the "cloud" should be given its plain and ordinary meaning, Sonos explains that its "plain meaning" of cloud would actually refer to "computing systems that are not part of any 'local' network of a user, but rather are remote from a user's 'local' network and are accessed by the user's devices via a wide-area network such as the Internet." *Id.* Sonos therefore effectively asks for a construction of "cloud" that is "via a wide-area network such



as the Internet.” To narrow the number of disputes for the Court, Google will agree to Sonos’s construction of “cloud” as “over a wide-area network such as the Internet.”<sup>13</sup>

**N. “a media particular playback system” [’615 Patent]**

<b>Sonos Construction</b>	<b>Google Construction</b>
“a media playback system”	Indefinite

There’s no dispute the claim as written is indefinite. Rather, Sonos is solely—and improperly—asking this Court to correct the patent by rewriting the claim. “A district court can correct a patent only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Novo Indus.*, 350 F.3d at 1357. “Those determinations must be made from the point of view of one skilled in the art.” *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009). Here, the proposed correction *is* subject to reasonable debate and therefore the claim is indefinite. Ex. 11, ¶¶56-59.

Claims 3, 15 and 26 of the ’615 patent recite “detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system.” In contrast, claims 1-2, 13-14 and 25 recite a “particular playback device,” and claims 2 and 14 recite a “media playback system” separate and distinct from the “particular playback device.” Contrary to what Sonos asserts, a POSITA would not readily understand that the inclusion of the word “particular” in the phrase “media particular playback system” was a typographical error to be corrected by omitting “particular.” Ex. 11, ¶56.

<sup>13</sup> Because the term “cloud” is subject to more than one ordinary meaning and there is the “actual dispute regarding the proper scope of the claims,” an express construction is required. *See O2 Micro Int’l v. Beyond Innovation Tech. Co.*, 521 F.3d 1351 (Fed. Cir. 2008).

There is no indication to a POSITA whether the “media particular playback system” of claims 3, 15, 26 corresponds to a playback system that can only play particular media formats, particular media types, or whether the inclusion of the word “particular” or the word “media” is a typographical error. *Id.* Although Dr. Schmidt opines that Sonos made a typographical error (Br. Ex. 24 at ¶103), Dr. Kyriakakis explains a POSITA could nonetheless understand “media particular” as intended to differentiate from “multimedia,” *i.e.* a playback system specific to a particular type of media – such as audio. Ex. 11, ¶56. For example, as discussed above in relation to the construction of “multimedia,” Sonos argues that “multimedia” is “any type of media that comprises audio (including audio alone).” Br. at 3. As Dr. Kyriakakis opines, certain playback systems also do not play back media. Ex. 11, ¶57. For example, an RF spectrum analyzer records and plays back RF data, not audio or video media. Accordingly, a POSITA could also understand “media particular playback system” as a subset of “playback systems.” *Id.* Evidently, Dr. Kyriakakis and Dr. Schmidt do not understand dependent claims 3, 15 or 26 in the same way, underscoring the indefinite nature of this claim term. Br. Ex. 24 at ¶103.

The prosecution history also does not resolve the reasonable debate relating to the use of the term “particular.” Sonos argues that the phrase “a media particular playback system” was introduced during prosecution when Sonos amended the independent claims to recite a “*particular* playback device” by propagating the word “particular” in front of “*playback* device” in various dependent claims. Br. at 22. However, there is no indication in the prosecution history that the “media particular playback system” was in error in claims 3, 15 and 26. Sonos paid the issue fee without any amendments after allowance, and Sonos did not submit any certificates of correction. At best, the prosecution history is inconclusive.

Sonos relies on *Castlemorton Wireless, LLC v. Bose Corp.* to support its theory that the allegedly erroneous insertion of “particular” can be detected by comparing claims 3, 15 and 26 with other similar claims which recite “media playback system.” 2020 WL 6578418, at \*2 (W.D. Tex. July 22, 2020). In *Castlemorton* the issue was with an antecedent basis issue with the use of “an frequency” in certain claims, and whether the only reasonable correction would be “a frequency” or “any frequency.” *Id.* But the error here does not have only one reasonable correction. Ex. 11, ¶¶55-58. Because the prosecution history is inconclusive, and the scope of the claims is not reasonably ascertainable by those skilled in the art, the term is indefinite.

**O. “data network” [’966, ’033, ’885 Patents]**

Sonos Construction	Google Construction
“a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other”	Plain and ordinary meaning; no construction necessary at this time

Sonos admits that “the term ‘data network’ is a well-understood term.” Br. at 23. Because the patents do not ascribe any special meaning to the term, the Court should reject Sonos’s attempt to artificially narrow the term’s meaning.

Sonos’ construction seeks to deviate from the plain meaning by restricting this “well known” term to networks that (1) transmit “digital data packets,” and (2) are bidirectional (as opposed to unidirectional). A “data network,” however, is not limited to a particular type of data (digital or analog), the manner of transmission (packet or non-packet), or the nature of the communication (b-directional or unidirectional). Ex. 11 (Kyriakakis Decl.), ¶60. Technical dictionaries confirm that “data”—including audio data—can be represented in both “analog” or “digital” form. Ex. 13. Google’s expert, Dr. Chris Kyriakakis, provides examples of data networks that can transmit analog data, and not “digital data packets,” such as circuit-switched networks, telephone networks and cellular network. Ex. 11, ¶62. Tellingly, the ITC ALJ and staff—which

Sonos relies on heavily in its briefing—rejected Sonos’s construction as inconsistent with the plain meaning of “data network.” Br., Ex. 7 at 16-19 (explaining that a data network does not necessarily utilize *digital* data packets); *see also* Ex. 14. Sonos’s attempt to limit the term to data networks that are bidirectional rather than unidirectional is also mistaken. There are many unidirectional networks that should not be read out of the claims, such as token-ring networks, data diode networks, broadcast networks, and multicast networks. Ex. 11, ¶66; *see also* Ex. 15 at 1:7:-15 (describing “system in which computer data and other content are served from one or more servers over a unidirectional network”).

The majority of Sonos’s citations to the patents say nothing about digital data packets or bidirectional communication, and the few references that use the word “digital data” or discuss the exchange of “packets” describe non-limiting embodiments. Br. at 23-25; *see also* ’906 at 5:21-39 (“*exemplary* functional block diagram” and zone player “*typically* executes a special set of rules (i.e., a protocol) to send data back and forth), 5:14-15 (“audio source *may* be shared...”), 5:62-6:4 (describing “one embodiment” and no mention of packets or bi-directional communication); ’033 patent at 7:4-18 (“audio source *can* be shared”), 7:44-51 (“in some embodiments... packets” are sent), 4:21-60 (describing “example zone player” and no mention of packets or bidirectional communication), 7:87-8:6 (“some embodiments”). As the ITC court concluded, “[w]hile there are references in the specification to both ‘digital data’ and ‘packets,’ the law is clear that limitations from the written description should not be read into the claims without other indicia that the patentee so intended to limit the invention.” Br., Ex. 7 at 17 (citing *Tate Access Floors, Inc. v. Maxcess Techs., Inc.*, 222 F.3d 958, 966 (Fed. Cir. 2000)). None of Sonos’s citations express any intent to exclude unidirectional or non-packetized data networks. Ex. 11, ¶69.

Sonos's experts do not dispute that "data" can be "digital" or "analog," or that data networks can transmit data in non-packet formats. None of the extrinsic evidence cited by Sonos supports that position either; indeed, Sonos presented similar evidence in the ITC action, but the ALJ rejected Sonos's arguments, concluding that the plain meaning of "data network" is not limited to bi-directional networks or data packets. Br., Ex. 7 at 16-19.

**P. "remote playback queue" ['033 Patent]**

<b>Sonos Construction</b>	<b>Google Construction</b>
Plain and ordinary meaning; no construction necessary at this time	"remote playback queue provided by a third party application"

The phrase "remote playback queue" does not appear in the specification of the '033 patent. It was only added during prosecution in November 2019, eight years after the original application was filed. Ex. 16. This was also several years after Google explained to Sonos how to create a "cloud queue," which Sonos is now trying to claim as its own in this lawsuit. D.I. 32 (Answer) at 23-25. Tellingly, Sonos originally referred to the "Direct Play" patents as the "Cloud Queue" patents before the court in California. D.I. 32 (Answer) at 23. But upon seeing the evidence produced in this case showing that it was Google who originated the "cloud queue" concept, Sonos has renamed the patents the "Direct Play" patents. Br. at 2. For these and other reasons, Google contends that "remote playback queue" lacks written description and Sonos's assertion of these claims are barred by a variety of defenses. D.I. 32 (Answer) at 23-28.

While Google contends the term lacks written description, to the extent the term is tethered at all to what is disclosed in the specification, it is providing a queue from a third party application as Google's construction requires. For example, the '615 specification solely discloses that "[c]ertain embodiments allow a third party application to override a local playback queue with its own application-specific queue.." '033 patent at 16:63-67. "In certain embodiments, a shared

queue is provided between the local playback system and the third party application to keep the local system and application synchronized.” ’033 patent at 17:1-4. In describing the ability to listen to music irrespective of the presence of the controller, the specification discloses that “[a] third party application can open or utilize an application programming interface (API) to pass music to the household playback system without tight coupling to that household playback system.” ’033 patent at 12:41-64. Under Sonos’s own case law (Br. at 6, n. 7), Google’s construction is the correct one. See *Groove Digital, Inc. v. United Bank*, 825 F. App’x 852, 856 (Fed. Cir. 2020) (“[A] patent’s repeated and consistent description of a claim term may inform its construction.”); *ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368, 1374-75 (Fed. Cir. 2009) (construing a term to include certain features because the specification “repeatedly and uniformly” described the term to include such features).

Sonos argues that “the claim language confirms that the ‘remote playback queue’ is provided by a ‘cloud-based computing system’ rather than ‘a third party application,’ as Google’s construction would require.” Br. at 27. This is incorrect. A remote playback queue “provided by a cloud-based computing system associated with a cloud-based media service” does not preclude the remote playback queue from being provided by a third party application using those systems and services. There is, therefore, no inconsistency or flaw created by Google’s proposed construction.

Sonos also argues that Google’s proposed construction improperly tacks on an additional limitation. Br. at 27. But claims also cannot “enlarge what is patented beyond what the inventor has described as the invention.” *Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 1355 (Fed. Cir. 2006). Sonos conspicuously does not cite a single portion of the specification regarding the “remote playback queue,” let alone an counter example contradicting Google’s

construction. Finally, Sonos disputes Google’s construction as allegedly introducing ambiguity in the claims. Br. at 28. But Google’s proposed construction properly reflects the content of the specification, as required by *Phillips*.

**Q. “an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to” [’033 Patent]**

Sonos Construction	Google Construction
Plain and ordinary meaning; no construction necessary at this time	“an instruction for the at least one given playback device...”; Instruction means one instruction.

The parties have one dispute regarding this term—whether the “instruction” claimed must be one instruction that performs the recited functions. Relying primarily on *Baldwin Graphics Systems, Inc. v. Siebert, Inc.*, 512 F.3d 1338 (Fed. Cir. 2008), Sonos argues that an indefinite article means that the “instruction” claimed may be “one or more.” Br. at 28. Sonos’s argument misconstrues the relevant claim language and ignores current Federal Circuit law.

**First**, Sonos ignores the relevant claim language. While the words “an instruction” alone may comprise one or more instructions in a comprising claim, that is not the relevant question here. The ’033 patent contains a lengthy limitation that details what a particular “instruction” requires, including three separate sub-limitations describing what “**the** instruction” does. ’033 patent at 17:53-65 (“wherein the instruction....” then reciting three sub-steps). The question is thus not whether “an instruction” in a vacuum allows for more instructions, but instead whether “the instruction” claimed in the entire limitation is one instruction. That the “instruction” here is, in fact, a singular instruction is so clear from the claim language that even Sonos’s brief later admits the claims refer to a singular “the instruction.” Br. at 30 (referring to “**the** transmitted ‘instruction’ recited in the independent claims” (emphasis added)).

The intrinsic record confirms Sonos's express intent to limit the instruction to a single instruction. During prosecution, Sonos distinguished the *Gran* prior art reference because it did not "transmit[] an instruction" but instead "*must continuously direct the media rendering device.*" Ex. 17 (emphasis in original). In other words, Sonos distinguished the *Gran* reference because it required transmitting multiple "continuous" instructions, rather than a single instruction to take over playback responsibility. *Id.* Sonos further distinguished *Gran* because it allegedly did not have an instruction to take over playback responsibility, "let alone transmit such an instruction that configures the media rendering device to" perform each of the recited sub-steps in the claim. *Id.* Sonos's entire argument was premised upon the claims requiring transmitting a single instruction for the media renderer to take over playback responsibility, as opposed to the prior art which required "continuous" instructions. Even under Sonos's cited authority *Baldwin*, the patentee here expressed "a clear intent' to limit 'a' or 'an' to 'one.'" *Baldwin*, 512 F.3d at 1342.

**Second**, Sonos fails to address current Federal Circuit law. In 2011, the Federal Circuit explained that "*Baldwin*, however, does not set a hard and fast rule that 'a' always means one or more than one." *Harari v. Lee*, 656 F.3d 1331, 1341 (Fed. Cir. 2011). And in 2016, the Federal Circuit decided *In re Varma*, which is directly on point. 816 F.3d 1352 (Fed. Cir. 2016). There, the Federal Circuit addressed the same argument presented by Sonos here and rejected it:

[H]ere the question is not whether there can be more than one request in a claim-covered system: there can. Rather, the question is whether "a" can serve to negate what is required by the language following "a": a "request" (a singular term) that "correspond[s]" to "two or more selected investments." It cannot. For a dog owner to have "a dog that rolls over and fetches sticks," it does not suffice that he have two dogs, each able to perform just one of the tasks. In the present case, no matter how many requests there may be, no matter the variety of the requests the system may receive, the system must be adapted to receive a request that itself corresponds to at least two investments.



*Varma*, 816 F. 3d at 1363 (footnote omitted). Sonos presents the same argument, arguing that it can have one instruction for “communicat[ing]...” (sub-step i), another for “us[ing]...” (sub-step ii) and yet another for “play back” (sub-step iii). But the claim language requires that there be one instruction that is “transmitted” and that the transmitted instruction perform all three sub-steps. Like the dog in *Varma*, the transmitted “instruction” must perform all three tricks in this claim.<sup>14</sup>

**R. “wherein the instruction comprises an instruction” [’033 Patent]**

Sonos Construction	Google Construction
Plain and ordinary meaning; no construction necessary at this time	Indefinite

Dependent claims 2 and 13, “fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). It is undisputed that independent claims 1 and 12 both require a particular transmitted “instruction.” Br. at 30 (referring to “the transmitted ‘instruction’ recited in the independent claims”). Dependent claims 2 and 13 then state that this instruction “comprises an instruction...” But this language creates the obvious problem of determining where one “instruction” ends and another begins, as well as determining what is one “instruction” versus a plurality of “instructions.” Because of these unanswered questions, Dr. Kyriakakis found in light of the intrinsic and extrinsic record that these claims fail to inform POSITA with reasonable certainty what “instruction” or “instructions” are required to meet or avoid the claim. Ex. 11, ¶¶74-76. This is the essence of the definiteness requirement—being able to determine with reasonable particularity the metes and bounds of the claim. *Synchronoss Techs., Inc. v. Dropbox, Inc.*, 987 F.3d 1358, 1366 (Fed. Cir.

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<sup>14</sup> To the extent Sonos’s proposal is adopted, the claims become hopelessly indefinite. The claim requires “transmitting an instruction” where that instruction has numerous requirements in the claim. See ‘033 patent at claim 1. If Sonos is correct that the claim permits a separate instruction for each sub-step, there is no way to determine which of those “instructions” must be “transmitted” to determine infringement, in what order and in what time interval.

2021) (finding invalid as indefinite claims requiring “generating a [single] digital media file” that itself “compris[es] a directory of digital media files.”)

In response, Sonos first points to unrelated Google patents to argue that Google has patents with similar claims, but none of the cited claims included an “instruction” or claim language similar to the ’033 patent. Br. at 30 n. 26. In the ’033 Patent, the independent claims begin by reciting “program instructions,” then requiring specific “instructions,” including a specific instruction that must be transmitted. Ignoring the term “instruction” in the ’033 patent would remove all substance from the claim.

Sonos’s second argument is to redefine “comprising” as “characterized by,” citing the MPEP. Br. at 30. Sonos conspicuously omits the full context of the MPEP’s statement. The full quote is: “The transitional term ‘comprising’, which is synonymous with ‘including,’ ‘containing,’ or ‘characterized by,’ is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.” Sonos does not address why “comprising” here should not be read consistently with *all* the definitions provided by the MPEP. A singular instruction cannot “contain” or “include” another singular instruction. A POSITA is left without any guidance and Sonos points to none in the claim language or specification. Even under Sonos’s redefinition of “comprising” as “characterized by” it is by no means clear how one instruction could “characterize” another instruction.

At bottom, Sonos argues that these are further limitations on “the instruction” recited in the independent claim. But that is not what is claimed. If Sonos wanted to claim that, it could have using well-known formulations like “further comprising” and not claiming one instruction comprising another. Sonos did not do so and must now live with the claim language it drafted.

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Respectfully submitted,

By /s/ Charles K. Verhoeven

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**CERTIFICATE OF SERVICE**

The undersigned certifies that on June 1, 2021, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document through the Court's CM/ECF system.

/s/ Charles K. Verhoeven  
Charles K. Verhoeven